

Date: Sat, 18 Dec 93 04:30:28 PST  
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>  
Errors-To: Ham-Homebrew-Errors@UCSD.Edu  
Reply-To: Ham-Homebrew@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Homebrew Digest V93 #136  
To: Ham-Homebrew

Ham-Homebrew Digest                      Sat, 18 Dec 93                      Volume 93 : Issue 136

Today's Topics:

                    chirping oscillator  
                            DF Question  
                    Guide to the Personal Radio Newsgroups  
            Help! Looking for spread-spectrum video link!  
            HELP: Looking for RF Sniffer design/kit  
                    Ramsey 6m  
                    Spray-on shielding  
                    VHF switching diodes

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>  
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 17 Dec 93 19:55:02 GMT  
From: ogicse!hp-cv!sdd.hp.com!col.hp.com!srngenprp!alanb@network.ucsd.edu  
Subject: chirping oscillator  
To: ham-homebrew@ucsd.edu

Majec Systems (majec@cactus.org) wrote:

: I have a chirping, whooping, and generally being anything but, stable  
: oscillator. As CW is my preferred form of rf emission this chirping  
: oscillator just won't cut it.  
:  
: The rig is a TEN-TEC pm2 (early 70's qrp rig) It's a direct conversion  
: style transceiver. ...  
  
: This is a fairly crude design in my opinion. The DPDT switch has single

: conductor hookup wire going from the switch to the board (six of them)  
: about 2.5 inches long. The switch selects between 80m and 40m lc circuits  
: which feed the base of the bipolar transistor, the oscillator. ...

The long leads would likely cause mechanical instability, but not chirp  
(except for a possibility mentioned below.)

What are you using for a power supply? If the power supply voltage is  
not rock-solid when you key the transmitter, that could easily cause the  
chirp. For a test, hook up the radio with short, fat leads to a car battery  
or well-regulated power supply. If the chirp goes away, then that's the  
problem.

: By the way there is no shielding around the transistor section  
: of the oscillator, the inductor is in a metal can but that's it.

The long leads leading to the VFO tank could be picking up RF from the  
power amplifier stage, which could cause chirp. Try shielding the entire  
VFO (aluminum foil works for a temporary test) to see if that's the cause.  
Check power supply bypassing -- RF can get into the VFO that way too.  
One of those could easily be the problem, since the power amplifier and  
oscillator are on the same frequency in direct-conversion transceivers.

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Date: 17 Dec 93 18:43:14 GMT  
From: ogicse!uwm.edu!math.ohio-state.edu!howland.reston.ans.net!  
usenet.ins.cwru.edu!slc6!trier@network.ucsd.edu  
Subject: DF Question  
To: ham-homebrew@ucsd.edu

In article <CI6Br5.1MK@iceonline.com>,  
Jan Chojnacki <janc@icebox.iceonline.com> wrote:  
>(If it wasn't CQ, then it was QST - do it cheap, go to your library  
>and fumble around in the stacks <g> ).

The designer of the Handi-Finder wrote an article for QST about it.  
I'm sure you could find it in the back issues.

You're right, it could probably be built bargain-basement if you have  
the right scrap parts. Is there a single kit out there that isn't that  
way?

What your money goes for in a kit is (1) instructions, (2) less time  
spent scrounging parts, (3) less time spent preparing parts (4) lower  
capital investment required for construction, (5) packaging, and (6) a

higher chance of successful construction. This is added value, and the kit maker charges you for it.

If you think the kit maker charges too much for the added value, you should build the thing from scratch. If you think the added value is worth it, buy the kit. Just remember whether or not it's worth it is a personal decision based on one's skills, resources, and junk box. :-)

Stephen

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Stephen Trier KB8PWA "The light at the end of the tunnel  
Work: trier@ins.cwru.edu may be an oncoming dragon"  
Home: sct@po.cwru.edu - Unknown

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Date: Wed, 15 Dec 1993 12:00:59 GMT  
From: nevada.edu!news.unomaha.edu!news@uunet.uu.net  
Subject: Guide to the Personal Radio Newsgroups  
To: ham-homebrew@ucsd.edu

Posted-By: auto-faq 3.1.1.4  
Archive-name: radio/personal-intro  
Revision: 1.5 09/18/93 16:49:31  
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.\*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to the author, Jay Maynard, K5ZC, by Internet electronic mail at jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September 1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to note the rmgroup of rec.radio.amateur.packet, and to officially retire some (in)famous threads of discussion on rec.radio.amateur.policy.

History  
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Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began to dominate other topics in the group and on the list. This resulted in the logical solution: a group was created to hold the packet discussion, and another corresponding mailing list was created as well: net.ham-radio.packet and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great Renaming essentially unchanged, moving from net.ham-radio[.packet] to rec.ham-radio[.packet]. Readership and volume grew with the rest of the network.

The INFO-HAMS mailing list was originally run from a US Army computer at White Sands Missile Range, SIMTEL20. There were few problems with this arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.\* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.\* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.\*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Klufft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to

the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups:

rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

#### The Current Groups

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I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate

as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.\* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.\* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar propagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administritivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at

UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

#### A Few Words on Crossposting

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Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

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Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can  
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.

"If my car ran OS/2, it'd be there by now" -- bumper sticker

GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

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73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

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Date: Thu, 16 Dec 1993 15:51:36 GMT

From: sdd.hp.com!elroy.jpl.nasa.gov!swrinde!cs.utexas.edu!howland.reston.ans.net!

torn!nott!cunews!freenet.carleton.ca!FreeNet.Carleton.CA!ab176@network.ucsd.edu

Subject: Help! Looking for spread-spectrum video link!

To: ham-homebrew@ucsd.edu

We are in need of a Spread-Spectrum video transmitter for a tele-robotics

application. If you know of a company that builds or distributes such a beast, we would greatly appreciate your sharing this knowledge.

I can be reached at the above address, or at wmercer@canada.cdev.com, ph # 613-596-7807, fax: 613-596-7874.

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VE3NFY - Wayne D. Mercer | Email: ab176@freenet.carleton.ca  
Computing Devices Canada | work: (613)596-7807  
PO Box 8508, MS 4140 | fax: (613)596-7874  
Ottawa, Ontario, Canada K1G 3M9

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Date: 17 Dec 93 13:31:24 EST  
From: titan.ksc.nasa.gov!titan.ksc.nasa.gov!nntp@ames.arpa  
Subject: HELP: Looking for RF Sniffer design/kit  
To: ham-homebrew@ucsd.edu

I'm looking for info (circuit diag/designs, kits, etc) that can be homebrewed and also not to much burnden on the pocket book? Appreciate any reply directly to above Email addr or posting.

TNX  
Tom  
AD4NA

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Date: 17 Dec 1993 18:19:54 GMT  
From: news.service.uci.edu!cerritos.edu!news.Arizona.EDU!math.arizona.edu!noao!ncar!gatech!howland.reston.ans.net!@network.ucsd.edu  
Subject: Ramsey 6m  
To: ham-homebrew@ucsd.edu

In article <CI6un1.CxE@acsu.buffalo.edu> v087jsfu@ubvms.cc.buffalo.edu (Danny Anderson) writes:

>Did anyone see the Ramsey 6m kit? The ad says a 12 year old did the 2m  
>kit. It would be real embarrassing if I ordered one and couldn't get it  
>to work. Does anyone do 6m? In our area there is about 7 repeaters.  
>Would it be safe to say, that you would not find anyone or hardly anyone  
>on them? If I got one, how do you check when the radio is good for DX?  
>If the conditions for DX are good do the repeaters still work?

I've built the Ramsey FX-440, and reviewed the 220 and 2m radio kit designs. They're quite mediocre. The spectral purity of the transmitted signal is variable and often not legal, and the



receiver is extremely poor by modern standards.

For the \$200 price tag of the kit and cabinet, you could buy a VHF lo-band Micor with a 60W output level, and four channels worth of crystals and elements. You'd have a considerably superior radio, though it would be larger and use crystals.

Alternatively, you could save your money up longer and buy an Azden mobile with many features the Ramsey doesn't have, including CTCSS, DTMF and a good receiver.

The Ramsey kits can be cleaned up to provide a clean transmitted signal, but the receiver will always be mediocre. Though Ramsey kits appear to be targeted at beginners, it requires much more than beginner skill to make the radios work reasonably.

Dana

--

\* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are \*  
\* (310) 348-6043 | mine and do not necessarily \*  
\* Dana.Myers@West.Sun.Com | reflect those of my employer \*  
\* This Extra supports the abolition of the 13 and 20 WPM tests \*

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Date: Thu, 16 Dec 1993 16:05:11 GMT  
From: sdd.hp.com!col.hp.com!srngenprp!glenne@network.ucsd.edu  
Subject: Spray-on shielding  
To: ham-homebrew@ucsd.edu

S. A. Modena (samodena@csemail.cropsci.ncsu.edu) wrote:

: Would anyone be able to steer me to a product and source for spray on  
: shielding? Such as I see as a sprayed on black crinkle layer on the  
: inside of plastic bezel parts on PCs...are there conductive-upon-  
: drying spray (or dip) paints available?

Steve

I've used the MS-485 spray-on coating on fiberglass to make homemade parabolic reflectors reflective. The MS stuff is nickle based and doesn't give quite as high conductivity as silver based products but it is certainly less expensive. They claim surface resistivity of 5 ohm per square when applied in a .002" layer. For RFI I expect it would be just fine. It's also available in bulk.

It is black but not a crinkle finish, at least not the way I've used it.

73

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na  
amateur IP: glenn@SantaRosa.ampr.org  
Internet: glenne@sr.hp.com

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Date: Thu, 16 Dec 1993 10:06:21 GMT  
From: ucsnews!sol.ctr.columbia.edu!math.ohio-state.edu!cs.utexas.edu!swrinde!  
gatech!europa.eng.gtefsd.com!library.ucla.edu!agate!doc.ic.ac.uk!uknet!pipex!  
pavo.csi.cam.ac.uk!pmms.cam.ac.uk!  
Subject: VHF switching diodes  
To: ham-homebrew@ucsd.edu

Following the recent PIN diode discussion, allow me this one.  
I am no expert.

I am working on a circuit using BA482 diodes, described as  
"VHF switching diodes". Who makes them? What are their specs?  
Are they PIN diodes?

Thanks,  
Andrew Thomason

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End of Ham-Homebrew Digest V93 #136

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